

**Storm Analysis** 

The center of Tropical Storm Hanna made landfall near the border between South Carolina and North Carolina at about 0320 am EDT

As of 09/06/2008 06:30 EDT, water levels along the coast of North Carolina are elevated between 0.2 to 2 feet above predicted. Water levels are rising, up to 4.9 feet above predicted, at Wilmington, NC. Water levels are falling along the coasts of Florida, Georgia and South Carolina; however, at Springmaid Pier, SC water levels are below predicted. Barometric pressure is falling north of Oregon Inlet Marina, NC, along the southern Virginia coast and rising south of Wrightville Beach, NC. Wind gusts of over 60 knots have been observed at Wrightsville Beach, NC.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

#### Tropical Storm HANNA QuickLook, POSTED 06:30 EDT 09/06/2008

Wilmington, NC: Next predicted high tide is 4.40 ft (1.34 m) at 09/06/2008 15:25 EDT.

Beaufort, NC: Next predicted high tide is 7.40 ft (2.26 m) at 09/06/2008 14:51 EDT.

Oregon Inlet Marina, NC: Next predicted high tide is 1.10 ft (0.34 m) at 09/06/2008 13:23 EDT.

Wrightville Beach, NC: Next predicted high tide is 4.18 ft (1.27 m) at 09/06/2008 12:48 EDT.

Springmaid Pier, SC: Next predicted high tide is 5.10 ft (1.55 m) at 09/06/2008 13:10 EDT.

Oyster Landing (North Inlet Estuary), SC: Next predicted high tide is 4.90 ft (1.49 m) at 09/06/2008 14:11 EDT.

Charleston, SC: Next predicted high tide is 5.40 ft (1.65 m) at 09/06/2008 13:31 EDT.

Fort Pulaski, GA: Next predicted high tide is 6.90 ft (2.10 m) at 09/06/2008 13:42 EDT.

Fernandina Beach, FL: Next predicted high tide is 6.10 ft (1.86 m) at 09/06/2008 14:18 EDT.

Chesapeake Bay Bridge Tunnel, VA: Next predicted high tide is 2.80 ft (0.85 m) at 09/06/2008 13:31 EDT.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: ND		

**SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:** 

**TROPICAL STORM HANNA ADVISORY NUMBER 38** 

500 AM EDT SAT SEP 06 2008

HANNA MOVES ASHORE AS A TROPICAL STORM

AT 500 AM EDT 0900Z THE CENTER OF TROPICAL STORM HANNA WAS LOCATED NEAR LATITUDE 34.4 NORTH LONGITUDE 78.3 WEST OR ABOUT 150 MILES 240 KM NORTHEAST OF CHARLESTON SOUTH CAROLINA AND ABOUT 25 MILES 45 KM WEST-NORTHWEST OF WILMINGTON NORTH CAROLINA.

HANNA IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 22 MPH 35 KM/HR. A GRADUAL TURN TO THE NORTHEAST WITH AN INCREASE IN FORWARD SPEED IS EXPECTED TODAY AND TOMORROW. ON THE FORECAST TRACK THE CENTER OF HANNA WILL MOVE ACROSS EASTERN NORTH CAROLINA THIS MORNING ALONG THE MID-ATLANTIC COAST LATER TODAY AND TONIGHT. AND ALONG THE COAST OF THE NORTHEASTERN UNITED STATES AND SOUTHEASTERN CANADA ON SUNDAY.

MAXIMUM SUSTAINED WINDS HAVE DECREASED TO NEAR 60 MPH 95 KM/HRWITH HIGHER GUSTS. LITTLE CHANGE IN STRENGTH IS FORECAST DURING THE NEXT COUPLE

OF DAYS. HANNA IS EXPECTED TO LOSE TROPICAL CHARACTERISTICS BY LATE ON SUNDAY.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 200 MILES 325 KM FROM THE CENTER.

THE MINIMUM CENTRAL PRESSURE BASED ON SURFACE OBSERVATIONS AND RECENT AIRCRAFT RECONNAISSANCE DATA IS 983 MB 29.03 INCHES.

COASTAL STORM SURGE FLOODING ALONG THE ATLANTIC COASTS OF SOUTH CAROLINA AND NORTH CAROLINA SHOULD GRADUALLY SUBSIDE TODAY. STORM SURGE FLOODING OF 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS IS EXPECTED TODAY IN ALBEMARLE AND PAMLICO SOUNDS AND IN CHESAPEAKE BAY WHICH WILL SUBSIDE TONIGHT AFTER HANNA QUICKLY PASSES TO THE NORTHEAST.

HANNA IS EXPECTED TO PRODUCE RAINFALL ACCUMULATIONS OF 4 TO 6 INCHES FROM CENTRAL NORTH CAROLINA NORTHEASTWARD THROUGH EASTERN PORTIONS OF THE MID-ATLANTIC STATES SOUTHERN NEW YORK AND INTO SOUTHERN NEW ENGLAND WITH ISOLATED MAXIMUM AMOUNTS OF 10 INCHES POSSIBLE. THESE RAINFALL AMOUNTS COULD PRODUCE FLASH FLOODING ACROSS THESE REGIONS.

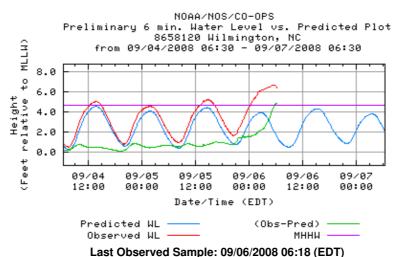
ISOLATED TORNADOES ARE POSSIBLE TODAY OVER EASTERN NORTH CAROLINA EASTERN VIRGINIA AND SOUTHERN MARYLAND.

#### FORECASTER KNABB

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

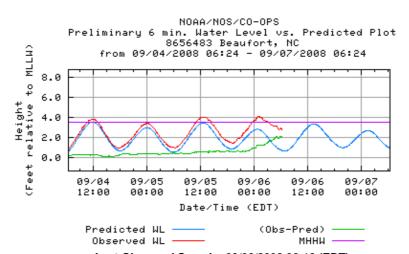
Jump to: Wilmington - Water Level, Beaufort - Water Level, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Springmaid Pier - Water Level, Springmaid Pier - Air/Water Temp, Springmaid Pier - Winds, Springmaid Pier - Barometric, Oyster Landing (North Inlet Estuary) - Water Level, Charleston - Water Level, Fort Pulaski - Water Level, Fort Pulaski - Barometric, Fernandina Beach - Water Level, Fernandina Beach - Winds, Fernandina Beach - Barometric, Chesapeake Bay Bridge Tunnel - Water Level, Chesapeake Bay Bridge Tunnel - Barometric,

# Wilmington, NC - Station Map Return to List



Relative to MLLW: Observed: 6.46 ft. Predicted: 1.56 ft. Residual: 4.90 ft. Historical Maximum Water Level: 10/15/1954, 3.47 ft. above MHHW

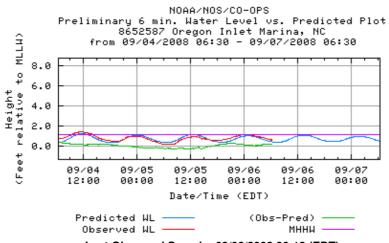
#### Beaufort, NC - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 2.68 ft. Predicted: 0.72 ft. Residual: 1.96 ft. Historical Maximum Water Level: 09/16/1999, 2.74 ft. above MHHW

# Oregon Inlet Marina, NC - Station Map Return to List

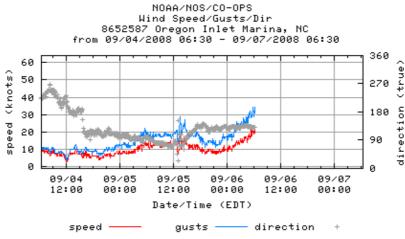


Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 0.65 ft. Predicted: 0.46 ft. Residual: 0.19 ft.

Historical Maximum Water Level: 09/16/1999, 4.49 ft. above MHHW

# Oregon Inlet Marina, NC - Station Map Return to List

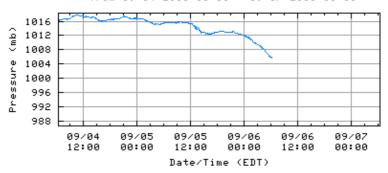


Last Observed Sample: 09/06/2008 06:18 (EDT)

Wind Speed: 21 knots Gusts: 34 knots Direction: 131 ° T

### Oregon Inlet Marina, NC - Station Map Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8652587 Oregon Inlet Marina, NC from 09/04/2008 06:30 - 09/07/2008 06:30

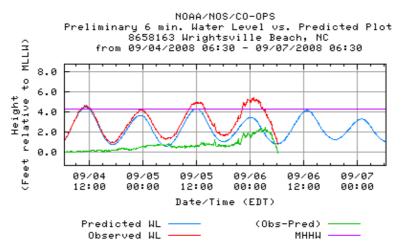


barometric pressure ——

Last Observed Sample: 09/06/2008 06:18 (EDT)

Barometric Pressure: 1005.8 mb

# Wrightsville Beach, NC - Station Map Return to List

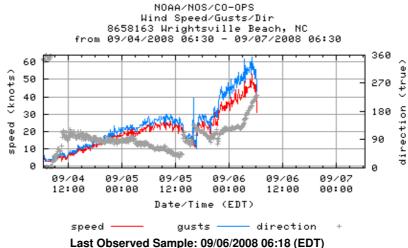


Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 0.79 ft. Predicted: 0.84 ft. Residual: -0.05 ft.

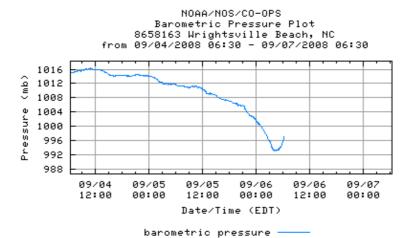
Historical Maximum Water Level: n/a

# Wrightsville Beach, NC - Station Map Return to List



Wind Speed: 31 knots Gusts: 43 knots Direction: 232° T

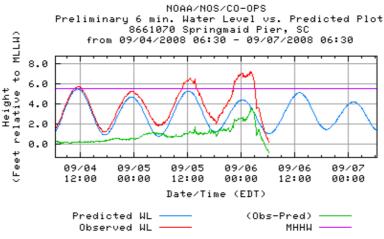
#### Wrightsville Beach, NC - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

Barometric Pressure: 997.2 mb

#### Springmaid Pier, SC - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 0.25 ft. Predicted: 1.06 ft. Residual: -0.81 ft. Historical Maximum Water Level: 01/01/1987, 3.65 ft. above MHHW

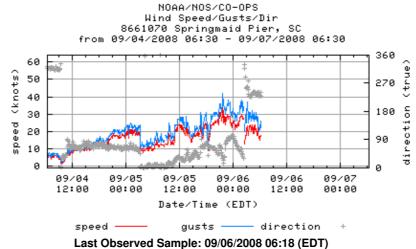
# Springmaid Pier, SC - Station Map Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8661070 Springmaid Pier, SC from 09/04/2008 06:30 - 09/07/2008 06:30 Temperature (F) 85 80 75 70 09/04 09/05 09/05 09/06 09/06 09/07 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) water temp. air temp

Last Observed Sample: 09/06/2008 06:18 (EDT)

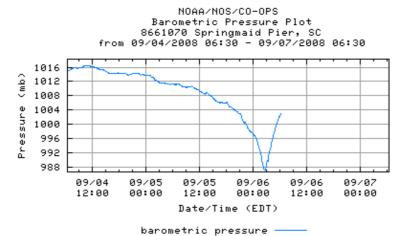
Water Temperature: 85.1° F Air Temperature: 75.0° F

### Springmaid Pier, SC - Station Map Return to List



Wind Speed: 17 knots Gusts: 22 knots Direction: 240 ° T

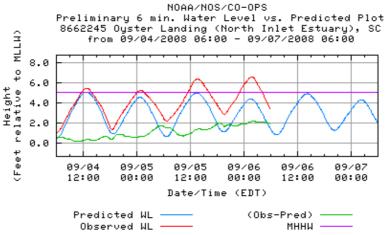
# Springmaid Pier, SC - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

**Barometric Pressure: 1003.1 mb** 

# Oyster Landing (North Inlet Estuary), SC - Station Map Return to List

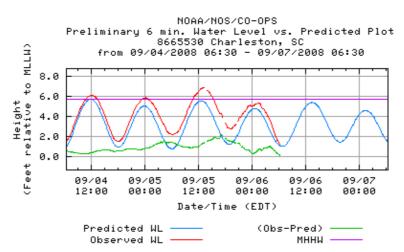


Last Observed Sample: 09/06/2008 05:48 (EDT)

Relative to MLLW: Observed: 3.47 ft. Predicted: 1.54 ft. Residual: 1.93 ft.

Historical Maximum Water Level: 07/22/2001, 2.21 ft. above MHHW

# Charleston, SC - Station Map Return to List

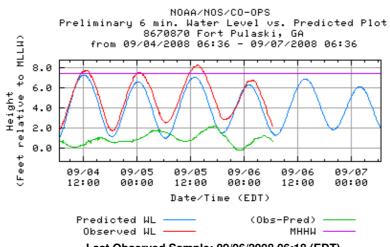


Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 1.24 ft. Predicted: 1.10 ft. Residual: 0.14 ft.

Historical Maximum Water Level: 09/21/1989, 6.76 ft. above MHHW

### Fort Pulaski, GA - Station Map Return to List

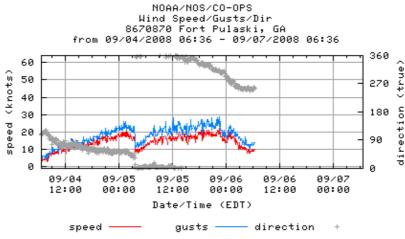


Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 2.22 ft. Predicted: 1.51 ft. Residual: 0.71 ft.

Historical Maximum Water Level: 10/15/1947, 3.4 ft. above MHHW

### Fort Pulaski, GA - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)
Wind Speed: 10 knots Gusts: 14 knots Direction: 256° T

#### Fort Pulaski, GA - Station Map Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8670870 Fort Pulaski, GA from 09/04/2008 06:36 - 09/07/2008 06:36 1016 1012 1008 Pressure 1004 1000 996 992 988 09/04 09/05 09/05 09/06 09/06 09/07 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT)

Last Observed Sample: 09/06/2008 06:18 (EDT)

barometric pressure

Barometric Pressure: 1008.8 mb

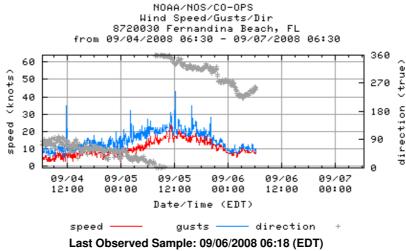
# Fernandina Beach, FL - Station Map Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8720030 Fernandina Beach, FL from 09/04/2008 06:30 - 09/07/2008 06:30 MLLW 8.0 Height relative to 6.0 4.0 2.0 0.0 (Feet 09/05 09/06 09/07 09/04 09/05 09/06 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted WL (Obs-Pred) Observed WL мнни

Last Observed Sample: 09/06/2008 06:18 (EDT)

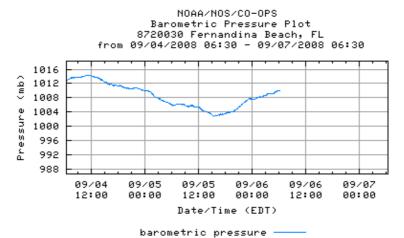
Relative to MLLW: Observed: 2.54 ft. Predicted: 1.53 ft. Residual: 1.01 ft. Historical Maximum Water Level: 10/02/1898, 6.94 ft. above MHHW

### Fernandina Beach, FL - Station Map Return to List



Wind Speed: 7 knots Gusts: 8 knots Direction: 249° T

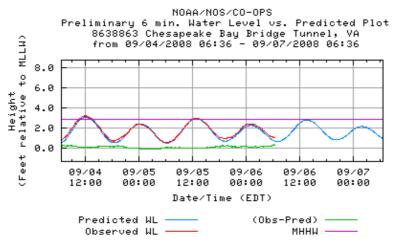
#### Fernandina Beach, FL - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

**Barometric Pressure: 1010.1 mb** 

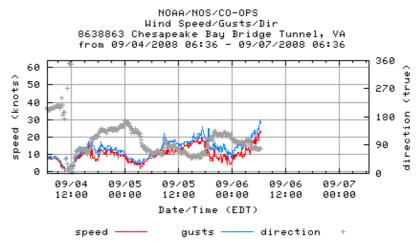
# Chesapeake Bay Bridge Tunnel, VA - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

Relative to MLLW: Observed: 1.08 ft. Predicted: 0.73 ft. Residual: 0.35 ft. Historical Maximum Water Level: 02/05/1998, 3.68 ft. above MHHW

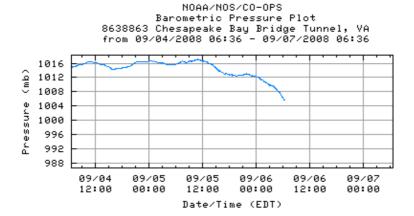
# Chesapeake Bay Bridge Tunnel, VA - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

Wind Speed: 23 knots Gusts: 28 knots Direction: 079° T

# Chesapeake Bay Bridge Tunnel, VA - Station Map Return to List



Last Observed Sample: 09/06/2008 06:18 (EDT)

barometric pressure

Barometric Pressure: 1005.6 mb

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce